



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,478

04/20/2006

Hideki Ito

13241/15

5422

23838 7590 03/23/2010

KENYON & KENYON LLP
1500 K STREET N.W.
SUITE 700
WASHINGTON, DC 20005

EXAMINER

NELSON, MICHAEL B

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,478	Applicant(s) ITO ET AL.	
	Examiner MICHAEL B. NELSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1794

DETAILED ACTION

Response to Amendment

1. Applicant's amendments filed on 12/18/09 have been entered. Claims 1-3 are currently under examination on the merits.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-3 recite a "tensioning ratio" which is vague and indefinite in that it is unclear what the ratio is meant to be the quotient of. The specification discloses that the tensioning ratio "represents a ratio to a film width after the first stage of drawing" (page 81). It is unclear what "a ratio to" means and what specifically is in the numerator and the denominator of the ratio.

Examiner's Note

4. The use of produce-by-process limitations has been noted in new amendments, such as, for example, "made by a process comprising..." While art has been found to render these added process limitations obvious, the examiner wishes to point out that in general, even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated in Thorpe, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. In re Pilkington, 411 F.2d 1345,

Art Unit: 1794

1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1794

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito WO 2003/091004, see English language equivalent (U.S. 2006/0057346) in view of Sakamoto (U.S. 5,061,571).

Regarding claim 1, Ito discloses a heat shrinkable polyester film with all of the instantly claimed properties A-C (See claim 1) and which is produced through the same stretching conditions ([0075]-[0078]). A heat setting step is also disclosed after the first drawing step ([0077]). Ito does not disclose that the heat-shrinkable polyester film satisfies the following requirements (D) to (E):

- (D) a three-dimensional surface roughness $S\Delta a$ is 0.008 to 0.04;
- (E) a three-dimensional surface roughness SR_z is 0.6 to 1.5 micrometers.

Sakamoto discloses a polyester film meeting the instant surface roughness and lubricant limitations.

(See Table 1, C3 and C4, Example 1, the lubricant is calcium carbonate present at 0.3% (calcium carbonate being a lubricant as set forth in the instant specification on page 18). The resulting surface roughness, R_a , of the film is 0.0012 and the R_z can be calculated using the R_a to R_z ratio to be 0.074 (i.e. 0.012×6.2). The film has surface uniformity, excellent running property and wear resistance (See Abstract).)

The inventions of both Ito and Sakamoto are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the surface roughness of the film of Ito by including the inorganic particles as taught by Sakamoto for the purposes of imparting improved running property.

Art Unit: 1794

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito WO 2003/091004, see English language equivalent (U.S. 2006/0057346), in view of Sakamoto (U.S. 5,061,571) and further in view of Boseki (JP-2002-331581), see machine translation.

Regarding claim 2, Ito discloses a heat shrinkable polyester film with all of the instantly claimed properties A-C (See claim 1) and which is produced through the same stretching conditions ([0075]-[0078]). A heat setting step is also disclosed after the first drawing step ([0077]).

Ito does not disclose that the heat-shrinkable polyester film satisfies the following requirements (F) to (G):

- (F) a light transmission at a wavelength of 380 nm is not more than 20%, and a light transmission at a wavelength of 400 nm is not more than 60%;
- (G) a Haze value is not more than 15%.

Boseki discloses a polyester film wherein:

- (F) a light transmission at a wavelength of 380 nm is not more than 20%, and a light transmission at a wavelength of 400 nm is not more than 60%;
- (G) a Haze value is not more than 15%.

(See Claim 1, hayes is assumed to be a mistranslation of haze. The disclosed numerical ranges exactly match the instant claimed ranges. The invention relates to reducing the UV light penetration of heat shrinkable polyester films for use as labels.)

The inventions of both Ito and Boseki are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the light transmittance and haze of the film of Ito by absorbing light

Art Unit: 1794

in the visible light range as taught by Boseki for the purpose of reducing the UV light penetration of heat shrinkable polyester films.

Ito does not disclose the instant lubricant. Sakamoto discloses a polyester film meeting the instant surface roughness and lubricant limitations.

(See Table 1, C3 and C4, Example 1, the lubricant is calcium carbonate present at 0.3% (calcium carbonate being a lubricant as set forth in the instant specification on page 18). The resulting surface roughness, Ra, of the film is 0.0012 and the Rz can be calculated using the Ra to Rz ratio to be 0.074 (i.e. 0.012×6.2). The film has surface uniformity, excellent running property and wear resistance (See Abstract).)

The inventions of both modified Ito and Sakamoto are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the surface roughness of the film of modified Ito by including the inorganic particles as taught by Sakamoto for the purposes of imparting improved running property.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito WO 2003/091004, see English language equivalent (U.S. 2006/0057346), in view of Sakamoto (U.S. 5,061,571) and further in view of Hayakawa et al. (WO 02/087853), see English language equivalent (U.S. 2003/0165658) and further in view of Ito WO 2003/091004, see English language equivalent (U.S. 2006/0057346).

Regarding claim 3, Ito discloses a heat shrinkable polyester film with all of the instantly claimed properties A-C of the previous claims (See claim 1) and which is produced through the

Art Unit: 1794

same stretching conditions ([0075]-[0078]). A heat setting step is also disclosed after the first drawing step ([0077]).

Ito does not explicitly disclose the specific instant requirements (a), (b), and (c) of the heat-shrinkable polyester film. However, in light of the substantially identical stretching conditions, one having ordinary skill in the art would expect the film of the combination to possess the claimed properties (i.e. requirements (a), (b) and (c)), absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980).

Modified Ito '437 does not disclose that film be put on a roll having a length of 1000 to 6000 m or the instant method of obtaining samples.

Hayakawa et al. discloses a film roll of having a length of 1000 to 6000 m and wherein the samples are obtained in a following manner: an initiation end of winding of a film of steady region giving stable film properties in a longitudinal direction is defined as a first end, and a termination end of winding thereof is defined as a second end; a first cut-off point of the samples of the film is provided less than 2 m inside of the second end, and a final cut-off point is provided less than 2 m inside the first end; a plurality of sample cut-off points are provided at an interval of about 100 m from the first cut-off point.

(See [0132], the film roll is 1000m in length which falls within the instant claimed range. Also see [0187], claim 1, the location of samples on the film roll reads on the instant limitations for sample selection. The sample locations are disclosed as being chosen to ensure consistency in the film roll through out its length [0009]-[0012].)

Art Unit: 1794

The inventions of both Ito and Hayakawa et al. are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the film roll length and sample locations of Ito by using the length and sample locations of Hayakawa et al. for the purposes of imparting increased property consistency through the film length.

Ito does not disclose the instant lubricant. Sakamoto discloses a polyester film meeting the instant surface roughness and lubricant limitations.

(See Table 1, C3 and C4, Example 1, the lubricant is calcium carbonate present at 0.3% (calcium carbonate being a lubricant as set forth in the instant specification on page 18). The resulting surface roughness, Ra, of the film is 0.0012 and the Rz can be calculated using the Ra to Rz ratio to be 0.074 (i.e. 0.012×6.2). The film has surface uniformity, excellent running property and wear resistance (See Abstract).)

The inventions of both modified Ito and Sakamoto are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the surface roughness of the film of modified Ito by including the inorganic particles as taught by Sakamoto for the purposes of imparting improved running property.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined

Art Unit: 1794

application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No.7,279,204 (Serial 10/512,412) in view of Sakamoto (U.S. 5,061,571).

The 204 patent discloses all of the limitations except (D) and (E) which are taught by Sakamoto. The inventions of both Ito and Sakamoto are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the surface roughness of the film of Ito by including the inorganic particles as taught by Sakamoto for the purposes of imparting improved running property. The 204 patent also discloses the process steps as instantly claimed, (C12, L45-67), which would have been obvious to impart the properties of claim 1 of the 204 patent.

13. Claim 2 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No.7,279,204 (Serial 10/512,412), in view of Sakamoto (U.S. 5,061,571) in view of Boseki (JP-2002-331581), see machine translation.

Art Unit: 1794

14. The 204 patent discloses all of the limitations except (F) and (G) which are taught by Boseki and Sakamoto. For requirements F and G, Boseki discloses in claim 1, identical limitations on a polyester film for the purposes of reducing UV light transmission. For the lubricant requirements, Sakamoto discloses a polyester film meeting the instant surface roughness and lubricant limitations in order to impart improved surface uniformity. The 204 patent also discloses the process steps as instantly claimed, (C12, L45-67), which would have been obvious to impart the properties of claim 1 of the 204 patent.

15. Claim 3 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,279,204 (Serial 10/512,412), in view of Sakamoto (U.S. 5,061,571) in view of Hayakawa et al. (WO 02/087853), see English language equivalent (U.S. 2003/0165658).

The requirements a-c of instant claim 3, without the sample location limitations, and the disclosed requirements (A)-(C) of claim 1 are not patentably distinct. The 204 patent discloses all of the limitations (A)-(C) and Hayakawa et al. discloses the sample location limitations. For the film role sample location limitations, Hayakawa et al. discloses the same limitations in claim 1. The film role length would have been considered a result effective variable by those having ordinary skill at the time of the invention. For the lubricant requirements, Sakamoto discloses a polyester film meeting the instant surface roughness and lubricant limitations in order to impart improved surface uniformity. The 204 patent also discloses the process steps as instantly claimed, (C12, L45-67), which would have been obvious to impart the properties of claim 1 of the 204 patent.

Response to Arguments

16. Applicant's arguments of 12/18/09 are considered moot in light of the new grounds of rejection which were necessitated by applicant's amendments.

17. Applicant's affidavit has been entered and considered but is found to be deficient. The affidavit only compares one example of the prior art reference and is therefore deficient in that it is not representative of the prior art reference as a whole.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571) 270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

Art Unit: 1794

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia L. Nordmeyer/
Primary Examiner, Art Unit 1794

/MN/
03/04/10